

Title (en)  
SYSTEM FOR DRILLING UNDER-BALANCED WELLS

Title (de)  
SYSTEM ZUM BOHREN VON UNTERDRUCK-BOHRLÖCHERN

Title (fr)  
SYSTÈME POUR FORER DES PUITS EN SOUS-PRESSION

Publication  
**EP 2245264 A2 20101103 (EN)**

Application  
**EP 09710400 A 20090205**

Priority  
• US 2009033178 W 20090205  
• US 6945808 A 20080211

Abstract (en)  
[origin: US2009200085A1] A system and method for drilling a well bore with an under-balanced hydrostatic pressure. The system comprises a tubular containing a first port and wherein a well bore annulus is formed between the well bore and the tubular member, and a compression member disposed about the outer portion of the tubular member, the compression member having extending therefrom an internal sliding mandrel, and wherein the internal sliding mandrel contains a second port. The system further comprises an external sliding sleeve operatively associated with the internal sliding mandrel, wherein the external sliding sleeve containing a third port, and wherein in a closed position the first, second and third port are misaligned and in an open position the first, second and third port are aligned. The system also includes a compressible seal disposed about the external sliding sleeve and in contact with the internal sliding mandrel, the compressible seal responsive to a longitudinal weight transferred to the compression member. Also, a work string may be included, with the work string positioned within the tubular, with the work string having a drill bit attached at a distal end of the work string, and wherein a work string annulus is formed relative to the tubular and the work string.

IPC 8 full level  
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